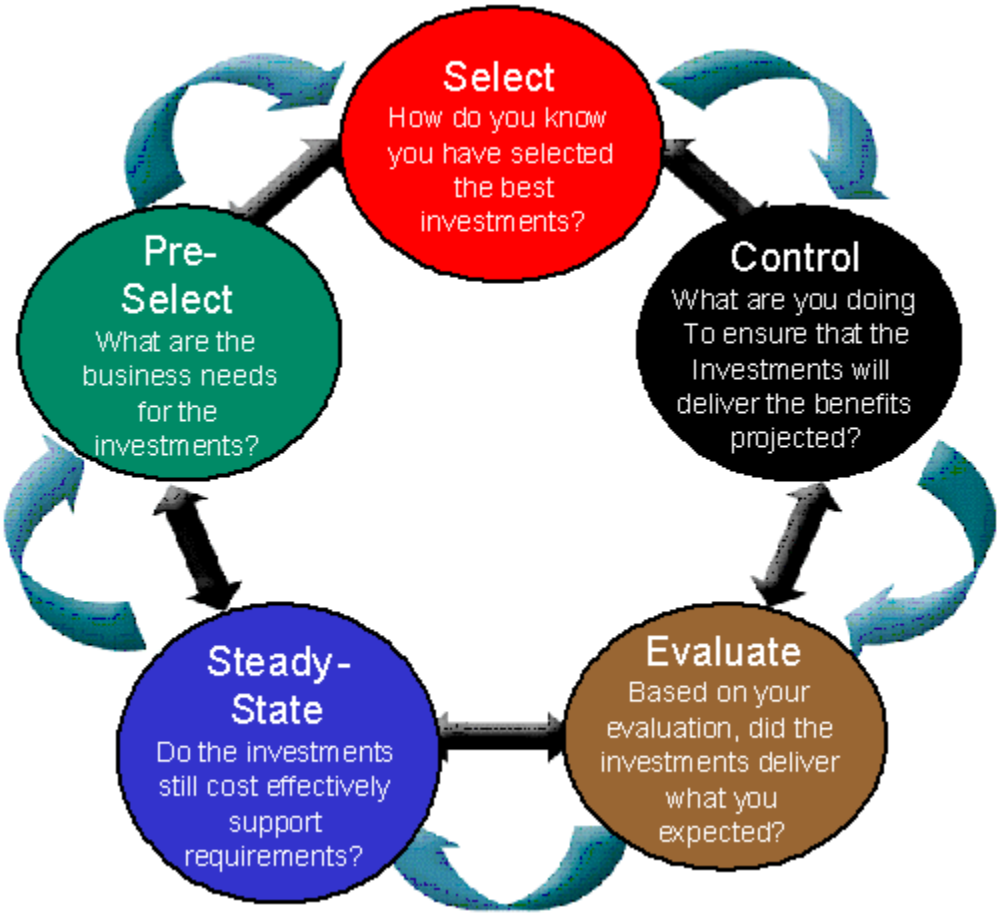
UNITED STATES DEPARTMENT OF THE

INTERIOR

Chapter 3

Construction



SECTION 1—PRE-SELECT PHASE

3.1.A PURPOSE

The Pre-Select Phase provides a process to:

- Assess a construction investment's support of both Bureau and Departmental strategic and mission needs.
- Provide initial analysis to further support construction investments.

Senior bureau and office decision-makers assess each proposed investment's support of DOI's strategic and mission goals and incorporate it into a multi-year investment plan. Project stakeholders compile the information necessary for developing preliminary business case supporting multi-year plans. Individual project proposals (Project Data Sheets) are assessed and prioritized in a multi-year plan.

During this phase the business/mission need is identified and relationships to the Department and Bureau strategic planning efforts are established. There are significant information requirements and a potential expenditure of funds in the preliminary planning phase to prepare for review and selection of investments. The Pre-Select Phase provides an opportunity to focus efforts and further the development of the proposed construction project. Program managers begin the process of defining business requirements, performance measures, benefits, and costs, as well as subsequent completion of a business case and project planning efforts in preparation for inclusion in the Department's construction investment portfolio.

3.1.B ENTRY CRITERIA

Prior to entering the Pre-Select Phase, the construction project must have a concept that supports the Bureau and Department mission needs.

3.1.C PROCESS

During the Pre-Select Phase, all proposed projects would have a construction project needs assessment to identify related mission goals that drive decision considerations for construction project alternatives. The needs assessment and the subsequent Project Data Sheet (see **Appendix C—Mission Needs Statement**) are linked to the strategic planning process of the Department and sponsoring Bureaus. The Program Manager/Program Sponsor develops the Project Data Sheet:

- Project Description
- Project Score
- Project Justification
- Project Cost and Status

Table 3.1-1 provides a summary of the Pre-Select Phase process, as well as the individual(s) and/or group(s) responsible for completing each process step. Each step is detailed following the table.

1. Identify Project Sponsor

The Bureau Head identifies a Project Sponsor for each accepted project.

- The Project Sponsor should be a senior individual in the organization with requisite management, technical, and business skills to lead the capital asset investment and work with Project Manager.
- The Project Sponsor is accountable to the Bureau Head and Bureau Investment Review Board for the capital asset investment as it continues through the CPIC process.

2. Needs Assessment and Project Data Sheet

The needs assessment is a forward-looking project planning effort that enables the Bureau's to determine and prioritize the most critical capital investments that will be considered in the development of DOI's construction project portfolio.

No.	Process Steps	Responsible Individual(s) or Group(s)
1	Identify Project Sponsor	Bureau Head
2	Needs Assessment and Project Data Sheets	Project Sponsor/Program Manager
3	Evaluate & Rank Proposed Projects Requests	Bureau Capital Assessment Team
4	Prepare Draft 5-Year Plan	Program Manager
5	Evaluate Draft 5-Year Plans; Revise, Prepare Final 5-Year Plan	Program Manager
6	Review/approve 5-Year Plan	Bureau Investment Review Board/ Bureau Head
7	Review initiative and recommend appropriate action and Make Pre-select investment decisions.	Executive CPIC

Table 3.1-1 Pre-Select Phase Process Steps

- Needs assessment is conducted within the framework of both the Department's and the sponsoring Bureau's long-range strategic goals
- If the needs assessment reveals a non-Construction solution (e.g., a rulemaking/policy change, operational procedural change, leasing, or contract for services) that can satisfy a capability shortfall and can be achieved within approved budgets, it should be implemented without proceeding further in the CPIC process.
- Needs assessment will identify the business drivers (i.e. Bureau mission, vision, goals, objectives, and strategic plans.)
- The Project Data Sheet is prepared from the supporting documentation in the needs assessment.

The principal activities of needs assessment are:

- Identify and quantify projected demand for services based on input from diverse sources such as the National Park visitors and tribal governments.
- Identify and quantify construction projects that will enable the Department and Bureau to perform their missions more efficiently and effectively.
- Identify and quantify existing and projected services based on information from field organizations, such as asset inventory, and Facilities Condition Assessment Survey (FCAS).
- Identify, analyze, and quantify capability shortfalls (i.e., the difference between demand and supply) in construction needs.
- Identify the user and customer base.
- Examples of potentially valid needs that could originate outside DOI lines of business include those related to socioeconomic and demographic trends, the environment, statutory requirements, or an industry-developed technological opportunity and Congressional budget add-ons.
- Assess the criticality and timeframe of the proposed construction project, and roughly estimate the resources the Bureau should commit to accomplishing it based on best value, and criticality.

3. Evaluation and Rank Proposed Project Requests

Evaluating and Ranking construction projects is the method for further examination of a proposed solution. The proposed projects are evaluated and ranked from the information provided in the Project Data Sheet. The project evaluation focuses on an analysis of alternatives

to meet the mission need and initial planning for entering into the Select Phase.
The following activities are conducted during evaluation and ranking:

Needs Assessment.
Discuss the proposed investment in relation to the OMB's "Pesky Questions:"

- **Does the investment in major capital asset support core/priority mission functions that need to be performed by the Federal Government?**
- **Does it have to be undertaken by the requesting Bureau because no alternative private sector or government source can more efficiently support the function?**
- **Does the investment support work processes that have been simplified or otherwise redesigned to reduce costs, and improve effectiveness?**

Identify high-level performance measures. (Lower level detailed performance measures will be developed as part of the Select Phase.)

Identify alternatives that will be analyzed to support mission need and business objectives.

A Project Data Sheet will be developed for each construction project in the 5-Year Plan.

Projects are also reviewed, as applicable, against existing DOI and Bureau priority lists, such as the DOI Dam Safety Technical Priority Rating List and the Seismic Safety Rehabilitation Priority List.

4. Prepare Draft 5-Year Plan

The Five-Year Plan provides the necessary information to support a Bureau's proposed construction project portfolio. While the primary emphasis of the Pre-Select Phase is on mission and strategic needs, it also requires the Program Manager to begin identifying alternative solutions and developing an estimate of costs and benefits (both quantitative and qualitative) that will be realized by the capital construction projects. The 5-Year Plan outlines the entire set of projects for each fiscal year and identifies for each project a preliminary budget estimate, project score, and project composition based on the established 5-Year Plan ranking categories. review, and make pre-select investment decisions.

- **Prepare preliminary budget estimate**— The preliminary budget estimate should provide an estimate of costs necessary to support more detailed planning and concept development prior to investment selection, and provide an estimate of budget requirements to support a five-year budget plan and lifecycle costing. If appropriate, full project funding should be requested.

5. Evaluate Draft 5-Year Plan; Revise Projects for Final 5-Year Plan

The Project Manager, Program Manager/Agency Sponsor prepares the draft 5-Year Plan package in preparation for the Department's annual capital asset pre-select investment review. The 5-Year Plan includes:

- Project Data Sheets
- Annual updating of proposed projects
- Evaluation and Ranking Construction Project Report
- Projects recommended for the Five-Year Plan

The format for submitting the proposed construction project package summary is the Project Data Sheet found in **Appendix C— Mission Needs Statement.**

6. Review/Approve 5-Year Plan

- The Bureau Investment Review Board reviews the projects to be put in the 5-Year Plan and make recommendations to the Bureau Head.
- The Bureau Head approves or disapproves recommendations and if need be ask for the Plan to be revised.
- The Bureau Head will forward proposed projects to be in the 5-Year Plan to the Executive CPIC.

7. Review Initiative and Recommend Appropriate Action and Makes Pre-select Investment Decisions

The Executive CPIC through a team lead by the Office of Managing Risk and Public Safety will

3.1.D EXIT CRITERIA

Prior to exiting the Pre-Select Phase, construction projects investments must obtain Executive CPIC approval for meeting the mission's need and complying with the Pre-Selection process.

SECTION 2—SELECT PHASE

3.2.A PURPOSE

In the Select Phase, DOI utilizes a structured review and evaluation process that ensures that the selected construction of IT investments fully support the mission and strategy of the Department. Individual investments are evaluated in terms of technical merit and program enhancement as measured by cost, schedule, benefit, and risk. Milestones and completion schedules are also established for each investment during the Select Phase.

In this phase, the Bureau Investment Review Boards reviews and approves the Capital Asset Plan (OMB Exhibit 300) for each project. The Executive CPIC receives the Business Plan or Capital Asset Plan approved by the Bureau Head and a Construction Team of the Executive-CPIC led by the Office of Managing Risk and Public Safety (MRPS) conducts a review and scoring of each project and develops comments and recommendations based on the contents and quality of the Capital Asset Plan. Investment submissions are assessed against a uniform set of evaluation criteria.

The investment's Capital Asset Plan is systematically scored using objective criteria endorsed by OMB and the investment is ranked and compared to other investments. The Executive CPIC forwards their findings and recommendations to the MIT. The MIT evaluates and recommends proposed Construction projects and defines an investment strategy. The MIT submits recommendations to the MEC who in turn reviews and validates the MIT's recommendations and forward with comment, as applicable, to the Secretary for final budget decision consideration

3.2.B ENTRY-CRITERIA

Prior to entering the Select Phase, investments must be included in the DOI approved 5-Year Plan.

3.2.C PROCESS

The Select Phase begins with an investment concept (approved during the Pre-Select Phase) and moves through the development of the Capital Asset Plan (business case, acquisition plan, risk analysis, performance measures, budget and a project schedule). These plans lay a foundation for success in subsequent phases. The Select Phase culminates in a decision whether to proceed with the investment.

Table 3.2-1 provides a summary of the Select Phase process as well as the individual(s) responsible for completing each process step. Each step is detailed following the table.

No.	Process Step	Responsible Individual(s) or Group(s)
1	Develop Integrated Project Team (IPT) and validate project scope	Project Manager
2	Identify and Secure Project Development Funding	Program Manager
3	Initiate Project Development	Project Manager
4	Finalize Capital Asset Plan & Justification (CAP)	Project Sponsor
5	Review and Approve CAP	Bureau Head / Bureau Investment Review Board
6	Review Bureau CAP and Scope/ Recommend Appropriate Action	Executive CPIC and MIT
7	Review & Validate Project Recommendation	MEC
8	Approve Bureau CAP and Submit to OMB	Secretary

Table 3.2-1 Select Phase Process Flow

1. Develop Integrated Project Team and Validate Project Scope

The Program Manager reviews the project data sheet submitted for the Five-year plan and other documentation completed during the Pre-Select Phase and makes any necessary changes. The Project manager then develops quantifiable project outcomes with appropriate performance measures that focus on outcomes and public health and safety whenever possible. These performance measures will form a basis for judging construction success and user satisfaction.

The Project Manager coordinates the selection of the Integrated Project team (IPT) members that will assist in the initiative's development with concurrence from the Program Manager. The IPT brings together expertise from functional areas as required by the specifics of the initiative. The IPT normally involve functional experts in the following areas:

- Bureau Budget Analyst
- Procurement/Contracting Specialist
- Project Manager with project management
- Technical Specialist with experience in relevant engineering and design requirements
- Program or Facility Specialist

Additional staff may be added from other functional areas as needed. Serving on the IPT will normally be an additional duty but initiative size or potential impact may increase commitment.

2. Identify and Secure Project Development

The Program Manager with support from the budget analyst will identify the funding source for support of the project during development. The Program Manager will then get approval from the appropriate Bureau management, as needed, depending upon the projects characteristics. The members of the IPT should assist in coordinating these actions within their respective functional areas.

3. Initiate Project Development

The Project Manager ensures, that for each investment, the following studies are completed and the results are submitted to the Project Sponsor.

- Business Profile:
  - Business Case with Performance Measures (see **Appendix G—Performance Measurement**) and mission needs statement
  - Functional Requirements
  - Risk Assessment
- Financial Profile:
  - Update project cost projections
  - Develop Alternatives
- Management and Planning Profile:
  - Project Plan, including a list of team members
  - Acquisition Plan and strategy

4. Finalize Capital Asset Plan and Justification

For those approved projects that meet the threshold levels (defined in Chapter 1.5) or are of special interest to DOI and/or OMB, a detailed Capital Asset Plan is prepared by the Project Sponsor for submission to the Bureau Investment Review Board for review and approval. For those projects that are below the threshold level, yet are significant projects, it is strongly encouraged that a detailed capital asset plan should be completed and be utilized by the Bureau to manage these projects with the same level selection and control as the threshold projects.

The Bureau Sponsor submits the Capital Asset Plan and their accompanying 5-Year Plan, Project Data Sheet for review by the Bureau Investment Review Board. The format for submitting the Capital Asset Plan is the revised OMB Exhibit 300 for Construction projects is found in **Appendix M—OMB Exhibit 300**. Key elements of the Exhibit 300 submission are listed below. Other supporting investment documentation needed to evaluate other key areas are located in Appendix of this document and hould be attached, as needed, to OMB Exhibit 300. Supporting documentation may include:

- Introduction and brief overview of the investment;
- Mission Needs Statement **(See Appendix C—Mission Needs Statement)**;

- ❖ Acquisition strategy Statement **(See Appendix S—Acquisition Strategy)**;
- ❖ Initial project plan with estimated costs listed for each work breakdown structure (WBS);
- ❖ Performance goals;
- ❖ Architecture and facility design, including accessibility for persons with disabilities;
- ❖ Bureau ranking and priority;
- ○ Alternative Analysis, including LCC, ROI and Value Engineering analysis* Statement **(See Appendix E—Benefit Cost Analysis and Appendix U—Value Engineering)**
- ○ Risk Assessment and mitigation plans Statement **(See Appendix F—Risk Management)**

* Various types and levels of analyses may not be applicable at the time of the initial Exhibit 300 submission

5. Review/Approve Capital Asset Plan

The Bureau Investment Review Board reviews the project submission and requests the Project Sponsor, Program Manager, and/or Project Manager to update the package or make changes as needed, including review and certification of the project budget/costs by the CFO. The Bureau Head then approves the investment submission and forwards the Capital Asset Plan to the Executive CPIC. The current 5-Year Plan, Project Data Sheet for the project is also submitted at the time of the Capital Asset Plan submission.

6. Review Bureau CAP and Scope and Recommend Appropriate Action

The Executive CPIC receives the approved Capital Asset Plan from the Bureau Head and the MRPS-led team conducts a review and scoring of each project and develops comments and recommendations based on the contents and quality of the Capital Assed Plan. Investment submissions are assessed against a uni form set of evaluation criteria. The investment's Capital Asset Plan is systematically scored using objective criteria endorsed by OMB and the investment is ranked and compared to other investments. The Executive CPIC forwards their findings and recommendations for review by the MIT.

7. Review & Validate Project Recommendations

The MIT reviews the investment for compliance with Departmental strategic, legislative, and budgetary goals using standard criteria to objectively compare projects based on the data presented. The MIT validates and reviews the projects and their corresponding scores. The MIT then forwards their investment recommendations to the MEC for validation of recommendations and approval.

The MEC reviews the recommendation and recommends approval, disapproval or other actions to the Secretary who makes the final investment decisions. The Executive CPIC establishes in concert with the MIT, the implementation and review schedule for the Control Phase. The project initiative then moves to the Control Phase.

8. Approve Bureau CAP and Submit to

The Secretary has the final decision responsibility to approve and submit projects to OMB as part of the Department of the Interior's budget.

3.2.D EXIT CRITERIA

Prior to exiting the Select Phase, investments must have an Approved Capital Asset Plan with:

- ❖ performance goals and quantifiable performance measures;
- ❖ a project plan which details quantifiable objectives including an acquisition schedule, project deliverables, and projected and actual costs;
- ❖ project costs, schedule, benefits, and risks;
- ❖ investment review schedule for the Control Phase; and
- ❖ Executive CPIC, MIT, MEC and Secretarial approval to enter the Control Phase.

SECTION 3—CONTROL PHASE

3.3.A PURPOSE

The objective of the Control Phase is to ensure, through timely oversight, quality control, and executive review, that capital investments are conducted (designed and constructed) in a disciplined, well-managed, and consistent manner. Investments should be closely tracked against the various components identified in the Risk Assessment and Mitigation Plan developed in the Select Phase (see Chapter 3, Section 3.2.C). This phase also promotes the delivery of quality products and results in capital investments that are completed within scope, on time, and within budget. During this process, senior managers regularly monitor the progress/performance of ongoing capital investments projects against projected cost, schedule, performance, and delivered benefits.

Although DOI usually selects new investments annually, the Control Phase is an ongoing activity. It requires the continuous monitoring of ongoing capital investment projects through the design and construction or acquisition lifecycle. DOI reviews occur before the annual budget preparation process. Additionally, periodic or quarterly summary reviews are completed on updated capital asset plan submissions.

The Control Phase is characterized by decisions to continue, modify, or terminate a project. Decisions are based on reviews at key milestones during the project's design and construction lifecycle. The reviews focus on ensuring that projected benefits are being realized; cost, schedule and performance goals are being met; risks are minimized and managed; and the investment continues to meet strategic needs. Depending on the review's outcome, decisions may be made to suspend funding or make future funding releases conditional on corrective actions.

3.3.B ENTRY CRITERIA

Prior to entering the Control Phase, investments must have:

- Established performance goals and quantifiable performance measures
- Developed a project plan which details quantifiable objectives, including an
  - acquisition/outlay schedule, project deliverables/milestones, and projected and actual costs
- Identified costs, schedule, benefits, and risks
- Obtained funding to begin capital construction investment process.

Once the investment enters the Control Phase, the project sponsor/manager is responsible for the project performance and execution. The Bureau Head and the Bureau Investment Review Board will monitor the project throughout design and construction and report investment status to the Executive CPIC.

3.3.C PROCESS

During the Control Phase, an investment progresses from planning and design to construction. Throughout this phase, the project sponsor and project manager provide the Program Managers and the Bureau Investment Review Board with project reviews to assist them in monitoring all investments in the portfolio. Project reviews provide an opportunity for Program Managers to raise issues concerning the capital construction investment, including risk management, safety, value engineering change proposals, contract modifications, inspection management, etc.

The ability to adequately monitor capital construction projects relies heavily on the outputs from effective project execution and management activities. The Project Sponsor and Project Manager, in coordination with the Program Manager, develops a master milestone review calendar for evaluation and approval by the Bureau Investment Review Board and the Bureau Head. The Executive CPIC in consultation with the MIT maintains a control review schedule for all projects in the Department's capital construction investment portfolio and monitors investments quarterly.

Appendix Q—Quarterly/Milestone Control Review Checklist provides an outline of the items Bureaus must address in writing for each quarterly or milestone control review. The Executive CPIC through the MRPS-led team reviews investments at their discretion or if the cost, schedule, or performance varies more than 5 percent from expectations. Any project variances greater than 10 percent must be reported to OMB as required in OMB Circular A-11.

The Executive CPIC reviews are based on factors including the strategic alignment, criticality, scope, cost, and risk associated with all capital construction investments. The Project Sponsor establishes milestones as part of the investment baseline against which performance will be measured throughout the Control Phase. Bureaus are expected to uphold these milestones; OMB will hold agencies responsible for meeting milestones as originally indicated in the baseline.

Table 3.3-1—provides a summary of the Control Phase process, as well as the individual(s) and/or group(s) responsible for completing each process step. Each step is detailed following the table.

No.	Process Step	Responsible Individual(s) or Group(s)
1	Develop project assessment procedures and operating principles.	Project Sponsor
2	Assess project performance against CAP baselines.	Project Sponsor
3	Prepare and submit quarterly progress CAPs	Project Manager
4	Review and approve progress CAPs	Bureau Investment Review Board and Bureau Head
5	Review Bureau progress CAPs and recommend appropriate action	Executive CPIC
6	Review and evaluate (Projects with variance issues)	MIT
7	Approve Bureau CAP	MEC and the Secretary
8	Prepare and submit Completion CAP	Project Sponsor/Bureau Head
9	Submit completion CAP to OMB (Project close out)	Secretary

Table 3.3-1 Control Phase Process Flow

1. Develop project assessment procedures and operating principles.

The Project Sponsor and Project Manager establish the project management and executive plans, procedures, and practices to support project-monitoring activities. The Project Sponsor ensures that the investment still aligns with the Agency Mission and Strategic Plan. The Project Sponsor ensures that the project has been planned realistically. Project cost, schedule and performance baselines provide both the framework and sufficient detail to assess the status of the project's established major milestones, work units and deliverables.

2. Assess project performance against CAP baselines.

The Project Sponsor collects actual information on the resources allocated and expended throughout the Control Phase. The Project Sponsor compares the actual information collected to the estimated baselines developed during the Select Phase and identifies root causes for any differences. The Project Sponsor also maintains a record of any changes to the project's baselines when they occur and are approved by the Secretary. Periodic predictive estimates are done on project final cost and schedule, based on actual cost and schedule performance versus planned baselines. Earned value is calculated quarterly for all project cost and schedule components.

3. Prepare and Submit Quarterly Progress CAPs.

The Program Manager prepares and submits quarterly updates of CAP to the Bureau Investment Review Board, providing status on actual costs, schedule, and performance against established project baselines. An earned value analysis is preformed for project cost and schedule.

4. Review and Approve Progress CAPs

As part of the periodic milestone reviews during the Control Phase, the Bureau Head and Bureau Investment Review Board review the progress CAPs before they are submitted to the Executive CPIC. The Bureau Head and Bureau Investment Review Board are not required to initiate actions on projects, which have less than 5% variance from their original baselines for cost, schedule, or performance measures. On projects that have a 5% or greater variance, the Bureau Investment Review Board reviews the Corrective Action Plans and the Bureau Head, based on the investment review board's recommendation will approve or disapprove the proposed mitigation measures and corrective actions proposed in the CAP. The primary purpose of this assessment is to ensure the initiative is on schedule and to help identify issues or deficiencies that require corrective action. In some instances, where the business case may no longer exist or be as strong, or if significant changes to the cost, schedule, and technical baselines are required, it may also be necessary to terminate the project. The quarterly updated progress CAPs are submitted by the Bureau Head to the Executive CPIC.

5. Review Bureau Progress CAPs and Recommend Appropriate Action

Each investment in the Control Phase will be evaluated during the quarterly investment review. The format for submitting the quarterly Investment Package is the revised/updated OMB Exhibit 300 found in **Appendix Q—Quarterly/Milestone Control Review Checklist**. A full and complete Exhibit 300 is required, however, key elements of the 300 submission are listed below. Other supporting investment documentation to evaluate other key areas are located in this Section and the Appendix Section of this document and should be attached, as needed, to the Exhibit 300.

- Introduction and brief overview of the investment
- Cost vs. baseline
- Schedule vs. baseline
- Performance vs. baseline
- Validated/updated CBA
- Risk Management

Note that projects that provide insufficient performance measure documentation could be subject to reduced or delayed project funding.

The Executive CPIC, through the MRPS-led team, assesses the investment's progress based on the earned value analysis, size and type of variances, project performance measures, and proposed action(s) by the Bureau to mitigate or eliminate project variances. The Project Sponsor and Project Manager works with the Executive CPIC to address the issues and furnish details as requested. The Executive CPIC assesses whether the investment is still feasible (i.e., is it still meeting its performance requirements?). Have performance gaps been identified and tracked, and has a mitigation plan been initiated to overcome the gaps?

The Executive CPIC forwards the updated Exhibit 300 Investment Package, along with its assessment, to the MIT for review.

6. Review and Evaluate Project Recommendation (Projects with Variance Issues)

The MIT reviews the recommendations of the Executive CPIC and determines whether there is still a business case to continue the capital construction investment. For each ongoing CAP that is reviewed by the MIT, a determination is made to approve, approve with conditions, or reject the Executive CPIC recommendations. The MIT determinations are forwarded to the MEC for validation and concurrence and then on to Secretary for approval or disapproval.

7. Approve Bureau CAP

The MEC reviews and validates MIT recommendations. The Secretary reviews the determinations of the MEC. The Secretary then accepts or rejects the MEC determinations and forwards a decision to the Bureau through the Executive CPIC and an updated Exhibit 300 to OMB if baseline changes will need to occur. If the CAP is conditionally approved by the Secretary, the Bureau Head is requested by the Executive CPIC to update the package, make changes as needed, and resubmit to the Executive CPIC. If the CAP is rejected, the project funding is rescinded and the Bureau is directed to close out the project immediately.

If the CAP is approved as submitted, the Bureau should work closely with the Executive CPIC to develop plans and solutions to eliminate, mitigate or manage identified project risks (e.g., financial, acquisition and technical). If the approved CAP results in an approved change in the baseline(s), then an updated, revised Exhibit 300 will be prepared to submittal to OMB.

8. Prepare and Submit Completion CAP

Upon completion of the capital construction project, a final completion CAP is prepared and submitted as part of the quarterly updates schedule. The Bureau Head and Bureau Investment Review Board verify that the project is fully completed and a final CAP is updated and all final cost figures, schedule deliverables, and performance goals are accurately reported.

The final CAP is prepared by the Project Sponsor and the Project Manager. It is sent forward through their Bureau Investment Review Board and the Bureau Head for review. If approved, it is submitted to the Executive CPIC. If not, it is returned to the Project Sponsor and Project Manager for rework.

9. Submit Completion CAP to OMB (Project Close Out)

The Executive CPIC, in coordination with the MIT reviews the final completion CAP and if appropriate recommends to the MEC and ultimately to the Secretary that it be forwarded to OMB for close out.

3.3.D EXIT CRITERIA

Prior to exiting the Control Phase, investments must have:

- Completed all project investments
- Project warrantee period underway
- Obtained Secretarial approval to enter the Evaluation Phase

SECTION 4—EVALUATE PHASE

3.4.A PURPOSE

The purpose of the Evaluate Phase is to compare actual to expected results after an investment is fully constructed. This is done to assess the investment's impact on mission performance, identify deficiencies while the project is still under warranty, identify the level of customer satisfaction, and revise the investment management process based on lessons learned.

The Evaluate Phase focuses on outcomes:

- Determining whether the capital construction investments have met their performance, cost, and schedule objectives.
- Determining the extent to which the capital investment management process improved the outcome of the investment.
- Determining the extent to which the construction project was constructed in accordance with plans and specifications and correcting any deficiencies identified during the warranty period.
- Determining weather the facility is meeting the customer requirements for which it was constructed.
- Determining overall customer satisfaction.

The outcomes are measured by collecting performance data, comparing actual to projected performance and conducting a Post Occupancy Evaluation (POE). The POE includes a methodical assessment of the investment costs, performance, benefits, and level of customer satisfaction. The bureau conducts the POE and the results are shared within the bureau and other bureaus within the agency that would benefit from the information.

3.4.B Entry Criteria

The Evaluate Phase begins once the project has been accepted and occupancy or other use of the facility begins. Prior to entering the Evaluate Phase the investments must have:

- Completed construction, and held a final inspection;
- Issued appropriate contracting documents to the contractor-indicating acceptance of the project; and
- Completed a final OMB Exhibit 300 form.

3.4.C PROCESS

In the Evaluate Phase, construction projects move from implementation or termination to warranty and maintenance. From the time the project is completed it is monitored for performance, reliability, sustainability, and user satisfaction. During the POE information is gathered and compared against the original stated project performance. Then lessons learned from the POE are shared with applicable audiences.

Table 3.4-1 provides a summary of the Evaluate Process, as well as the individual(s) and/or groups responsible for completing each process step. Each step is detailed in the following table.

No.	Process Step	Responsible Individual(s) or Group(s)
1	Prepare Construction Completion Report	Project Sponsor
2	Monitor Warranty Period	Project Sponsor/Project Manager
3	Conduct Post Occupancy Evaluation	Project Manager
4	Prepare Post Occupancy Report	Project Manager
5	Document and Share Best Practices/Lessons Learned within Bureau and with the Executive CPIC	Program Manager
6	Distribute Shares Best Practices/Lessons Learned Department Wide	Executive CPIC

Table 3.4-1

1. Prepare Construction Completion Report

The construction completion report is completed after the facility has been accepted from the construction contractor. Preparation of the construction completion report is preceded by final payment to the contractor and final acceptance of the facility by the government. The construction completion report documents actual expenditures, performance, schedule, and other budgetary issues associated with the project. The project is entered into the Bureau real property inventory.

2. Monitor Warranty Period

During the warranty period the project sponsor or project manager compares the facility performance against the contract warranties. When specified performance is not met the contractor or manufacturer is notified of the performance deficiency and requested to repair or replace the defective parts or systems. It is critical to document product and system performance failures during the warranty period since this information is shared as part of the best practices and lesson learned occurring at the end of Evaluate Phase. During the warrant period the project sponsor must be careful to avoid maintenance and operational practices that void product or systems warranties. Depending on the specific product or system, the warranty my cover the products for as little as 1 year or for as long as 20 years.

3. Conduct Post Occupancy Evaluation (POE)

The POE generally occurs after the facility has been in use for approximately 1 year. By delaying the POE for approximately 1 year the users of the facility have been able to develop a understanding of the facility operates and if the performance a originally specified is being met, and if the original performance was stated properly. At the heart of the evaluation is the investment analysis; the Project Manager and Sponsor review the impact the project has had on customers, the mission and program and the technical capability. As a result of the evaluation the Project Sponsor provides information back through project manager to the program manager and the Bureau Investment Review Board.

The evaluation focuses on three areas:

- *Impact to stakeholders and customers*. The Project Manager typically measures the impacts of the construction project on customers, both internal and external, and on stakeholders through user surveys, interviews, and feedback studies.

- *Ability to deliver the performance measures.* The construction projects impact to mission and program should be carefully evaluated to determine whether the project delivered expect results when compared to the investment's original performance goals. The projects original performance goals are also re-evaluated to

determine whether they were properly set to maximize to support or impact the mission goals.

- *Ability to meet baseline goals*. The following areas should be reviewed to determine whether the investment is meeting its baseline goals.
  - *Cost*-Is the project meeting the life cycle cost projections.
  - *Sustainable practices*-Determine whether the sustainable features originally designed into the project are functioning as anticipated.
  - User expectations-Determine if the facility is meeting user expectations as originally prescribed. As an example this might include accessibility, interpretative features ability to communicate their story, maintainability, office space meeting user needs, and functionality of spaces.
  - Stakeholders-Determine if the facility is meeting stakeholder expectations or regulatory requirements. This might include coordination with stakeholders in areas such as air and water quality to assure state or local regulations are being met.

4. Prepare Post Occupancy Report

When the POE is complete the project manager prepares a Post Occupancy Report documenting the results of the evaluation. The report is submitted to the Program Manager for review and approval.

5. Document and Share Best Practices/Lessons Learned

The Program Manager shares information contained within the Post Occupancy Report with bureau design groups, and project sponsors with similar projects, their Bureau's Investment Review Board, Executive CPIC, other program managers who could benefit from the information.

The best practices/lessons learned form the basis for developing performance measures on future projects.

6. Distribute Summary of Best Practices/Lessons Learned Department Wide

Executive CPIC consolidates best practices/lessons learned received from the bureaus and prepares an annual report for Departmentwide dissemination of best practices/lessons learned that is shared with the bureaus.

3.4.D EXIT CRITERIA

Prior to exiting the Evaluate Phase investments must have:

- Completed a Construction
- Completion Report
- Conducted a Post Occupancy Evaluation
- Completed a Post Occupancy Report

SECTION 5—STEADY-STATE PHASE

3.5.A PURPOSE

The Steady-State Phase provides the means to assess mature capital investments, ascertain their continued effectiveness in supporting mission requirements, evaluate the cost of ongoing maintenance requirements, and consider potential retirement or replacement of the capital investment. The primary review focus during this Phase is on the mission support, cost, and condition assessment. Process activities during the Steady-State Phase provide the foundation to ensure mission alignment and support for optimum facility operation and ongoing maintenance plans.

3.5.B ENTRY CRITERIA

Prior to entering the Steady-State Phase, investments must have:

- Prepared a Completion Report
- Conducted a Post Occupancy Evaluation
- Prepared a Post Occupancy Report

3.5.C PROCESS

During the Steady-State Phase, mission analysis is used to determine whether mature investments are optimally continuing to support mission and user requirements. An assessment of facility deficiencies and needs is conducted in the form of an annual Condition Assessment. **Appendix D—Steady-State Investment Review Template** provides criteria necessary for conducting a Condition Assessment.

Table 3.5-1 provides a summary of the Steady-State Phase process, as well as the individual(s) and/or group(s) responsible for completing each process step. Each step is detailed following the figure.

No.	Process Step	Responsible Individual(s) or Group(s)
1	Prepare Facility Maintenance Plan.	Facility Manager
2	Evaluate facility operation against maintenance plan.	Facility Manager/Program Manager
3	Identify facility deficiencies and needs.	Facility Manager/Program Manager
4	Quantify needs and prepare initial project description and justification	Project Sponsor

Table 3.5-1. Steady-State Process Flow

1. Prepare Facility Maintenance Plan

The Facility Manager prepares a Maintenance Plan to determine if the mature investment is continuing to meet operational requirements and needs and supports the DOI evolving strategic direction. The needs analysis conducted in the Pre-Select Phase provides a framework to assist in the Facility Maintenance Plan for the Steady-State Phase. This includes an analysis of current operational requirements balanced against initially defined facility needs.

2. Evaluate Facility Operations Against Maintenance Plan

The Facility Manager and/or Program Manager evaluates the current facility functions and operations against the Maintenance Plan. This information should be used to assess and update the facilities performance and predict and prevent system failures.

3. Identify Facility Deficiencies and Needs

The Facility Manager and/or Program Manager conducts a Facility Condition Assessment, which identifies and itemizes the facility deficiencies.
A current inventory of real property items is conducted and validated. The inventory of items is evaluated from a life cycle perspective, deficiencies are itemized and a cost estimate is prepared.

4. Quantify Needs and Prepare Initial Project Description and Justification

The Project Sponsor reviews the individual property item condition assessments and prioritizes deficiencies in alignment with overall mission needs. Identified projects are categorized as deferred maintenance projects and are submitted into the budget cycle. Project descriptions and justifications are prepared in anticipation of the initiation of a corrective action project.

Corrective action projects are prioritized and moved forward into the next process step – Pre-Selection.

3.5.D EXIT CRITERIA

Prior to exiting the Steady-State Phase investments must be analyzed and a concept proposed that meets mission needs for the disposal, retirement, rehabilitation, or replacement of the facility.